



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,417	12/30/2003	Masaki Sato	2204-031470	7842

28289 7590 10/05/2004

WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C.
700 KOPPERS BUILDING
436 SEVENTH AVENUE
PITTSBURGH, PA 15219

EXAMINER

HESS, BRUCE H

ART UNIT PAPER NUMBER

1774

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,417

Applicant(s)

SATO ET AL.

Examiner

Bruce H Hess

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 1774

1. Claims 1, 2 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (U.S.P. 5,891,552) in view of Akada (U.S.P. 5,106,815).

Claims 3-6 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Akada and Kawai et al. (U.S.P 5,977,022).

Lu et al teach that non-dyeable materials such as plastic can be dyed by first applying a dye-receptive coating that contains glass flakes, calcium silicate and a U.V. absorber. Akada teaches that undyeable material such as plastic and metal can be dyed by first applying the same dye-receptive coating to either material (i.e., plastic or metal). Given Akada's teaching of the equivalence of plastic and metal as recipients of a dye-receptive coating, application of the Lu et al. dye-receptive coating to a metal substrate would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

Kawai teach the advantages of applying an intermediate layer between a metal substrate and a dye-receptive coating. Use of the Kawai intermediate layer in the imaged article of Lu et al as modified by Akada would have been an obvious expedient to one of ordinary skill in this art in the absence of unexpected results.

2. Claims 7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Takeuchi et al (U.S.P. 6,265,345) or Yoshida et al. (U.S.P. 6,265,345) taken with Akada.

Claims 3-6 and 17-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Takeuchi et al. or Yoshida et al taken with Akada and Kawai.

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Takeuchi et al or Yoshida et al taken with Akada and Lu et al.

Takeuchi et al and Yoshida et al teach that non-dyeable materials such as plastic can be dyed by first applying a dye-receptive coating that contains resin and silica powder. Akada teaches that undyeable material such as plastic and metal can be dyed by first applying the same dye-receptive coating to either material (i.e., plastic or metal). Given Akada's teaching of the equivalence of plastic and metal as recipients of a dye receptive coating, application of the Takeuchi et al. or Yoshida et al. dye receptive coating to a metal substrate would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

Kawai teaches the advantages of applying an intermediate layer between a metal substrate and a dye receptive coating. Use of the Kawai intermediate layer in the imaged article of either Takeuchi et al. or Yoshida et al as modified by Akada would have been an obvious expedient to one of ordinary skill in this art in the absence of unexpected results.

Lu et al teaches the use of U.V. absorbers in dye-receptive coatings. Use of the LU et al. U.V. absorber for its concomitant function in the dye-receptive layer of either Takeuchi et al. or Yoshida et al. would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

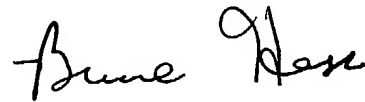
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce Hess whose telephone number is (571) 272-1525. The examiner can normally be reached on Monday to Friday 9 Am to 5 PM.

Art Unit: 1774

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. Hess/af
September 29, 2004

A handwritten signature in black ink, appearing to read "B. Hess", is located in the lower right quadrant of the page.